



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,100	06/21/2001	Joo-Hyoung Lee	P56382	3922

7590  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

10/31/2007

EXAMINER
----------

TRAN, TRANG U

ART UNIT	PAPER NUMBER
----------	--------------

2622

MAIL DATE	DELIVERY MODE
-----------	---------------

10/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/885,100

Applicant(s)

LEE ET AL.

Examiner

Trang U. Tran

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2007 and 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-12,17,22-24 and 26-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-12,17,22-24 and 26-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Sept. 04, 2007 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed Sept. 04, 2007 have been fully considered but they are not persuasive.

In re pages 9-14, applicants argue that claims 1, 11, 22 and 32, and their associated dependent claims, recite the invention in a manner distinguishable from the prior art because the examiner does not point out where, in Kuo et al '040, there is a disclosure of a displaying part (video display device 250 per paragraph 3, lines 4-5 of the final Office action) which comprises a control key part as recited in the last paragraph of claim 1, Kuo et al does not disclose or suggest the feature of first displaying the highlight portion and then adjusting the size and position of the highlight portion, as recited in independent claim 11, Kuo et al does not disclose or suggest a storage means or part for storing therein selection data for displaying a highlight portions, as recited in claims 1, 22 and 32, there are inconsistencies between the rejection of the claims as stated in the current final Office action and the previous

rejection of the claims as stated in the final Office action of May 20, 2004 (Paper No.8), and in the Office action of 3 November 2004 (Paper No 20041021, and, due to the fact that the Examiner does not provide support, in a form of citation to Kuo et al '040 or any other reference, for the statement of "inherency" in the previously quoted passage from the current Office action, there is not proper support for the rejection under 35 U.S.C. §102, or even for a rejection under 35 U.S.C. §103.

In response, the examiner respectively disagrees. As discussed in the last Final Office action, that claims 1 and 11 are rejected under 35 U.S.C. §103(a) in the Final Office action of 20 May 2004 (Paper No. 8) but, after reconsideration of Kuo et al, it is found that claims 1 and 11 can be rejected under 35 U.S.C. §102(e) rather than 35 U.S.C. §103(a). It is noted that claim can be rejected under 35 U.S.C. §102 if all the claimed features are explicitly or inherently disclosed in the reference. Kuo et al discloses in col. 4, lines 30-49 that "Moreover, the presenter can select one or more areas on the image by adding the edge of the selected areas to show portions of the image. In addition, different type of image processing can be performed in different selected areas and outside the selected areas. ...The aforementioned image processing can be the flicker of the image, the brightness adjustment, the contrast, and the color of the image". From the above passage, it is clear that the present can adjust the brightness of the selected area on the image. The brightness adjustment can add the highlight signal to the video signals to thereby increase the level of the composed video signal of the highlight portion or subtract the highlight signal from the video signals to thereby decrease the level of the composed video signals of the highlight portion as

recited in the claims. Also from the above passage, it is clear that the displaying part comprises a control key part (the remote controller disclosed in col. 5, lines 12-25) for controlling a size and a position of the highlight portion, and that the controller comprises an adjuster part for adjusting the picture in response to external signals adjusted by the control key part as required by the claims.

In re pages 14-18, applicants argue that independent claim 22 is distinguishable from the prior art so as to preclude rejection under 35 U.S.C. §102 based on Kuo et al, or under 35 U.S.C. §103 for alleged unpatentability over Kuo et al, either alone or in combination with any other reference because the claimed "signal composing part connected to said highlight signal generating part and to said signal generating means" and "image sharpness part connected between said selection means and said signal composing part".

In response, the examiner respectfully disagrees. As discussed in the last Final Office action, that the claims are rejected under 35 U.S.C. §103(a) in the final Office action of 20 May 2004 (Paper No. 8) but, after reconsideration of Kuo et al, it is found that claims can be rejected under 35 U.S.C. §102(e) rather than 35 U.S.C. §103(a) and that the claimed image sharpness part connected between selection means and a signal composing part for performing the function recited in claim 22 is met by the digital image processor 300, when the presenter uses the remote controller to change the scope, position, color, brightness, and even the number of the selected area(s) as disclosed in col. 6, lines 6-24.

In page 18, applicants argue that the rejection of independent claim 32 under 35 U.S.C. §102, or even under §103 because Kuo et al '040 does not make it clear as to whether or how the pixel clock input provided to the OSP signal generator 330 results in the setting up of a size and a position of a highlight portion as alleged by the Examiner.

In response, the examiner respectfully disagrees. Kuo et al discloses in col. 7, lines 7-67 that "Turning to FIG. 3, the horizontal coordinates of the points P, Q, R, and S, i.e.  $X_p$ ,  $X_q$ ,  $X_r$  and  $X_s$  are stored in the horizontal pixel shift register 402..., the pixel clock in horizontal counter 406 is within the value stored in horizontal pixel shift register 402...When a pixel is to be displayed, the multiplexer 516 controlled by the control signal 310 output a pixel according to the setting of the control signal 310..." From the above passage, it is clear the pixel clock under controlled of the OSP signal generator 330 anticipates the claimed "a clock generating part for generating a clock signal to set up a size and a position of the highlight portion" of claim 32.

In re pages 18-19, applicants argue that it is not clear from the cited patent as to how the shift registers 402 and 404 perform a function of adjusting a size of a clock signal input according to a control signal from selection means as recited in dependent claim 33.

In response, the examiner respectfully disagrees. As discussed above with respect to claim 32, the OSP signal generator 330 receives the pixel clock and adjusts a size of the pixel clock according to a control signal from the selection means (the remote controller).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-12, 17, 22, 27-29, 31-34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipate by Kuo et al. (US Patent No. 6,226,040 B1).

In considering claim 1, Kuo et al discloses all the claimed subject matter, note 1) the claimed a displaying part for displaying a picture is met by the video display device 250 (Fig. 2, col. 5, lines 26-37), 2) the claimed a selection input part for selecting for display a highlight portion within the picture of the displaying part is met by the infrared transmitter 260 which transmitted the selection input from the remote controller (Fig. 2, col. 5, lines 12-25), 3) the claimed a storage part for storing selection data according to the selection made through the selection input part is met by the storage device 267 which stored the position of the selected area (Fig. 2, col. 5, line 61 to col. 6, line 5), 4) the claimed a controller for generating a highlight signal corresponding to the highlight portion based the selection data, for composing the highlight signal with video signals to thereby generate composed video signals, and for displaying the highlight portion within the picture of the displaying part based on the composed video signals is met by the OSP signal generator 330 and the digital image processor 300 (Figs. 2-4, col. 5, line 61

to col. 7, line 33), and 5) the claimed wherein the controller performs at least one of adding the highlight signal to the video signals to thereby increase the level of the composed video signals of the highlight portion and subtracting the highlight signals from the video signals to thereby decrease the level of the composed video signals of the highlight portion is met by the presenter uses **the remote controller to change the scope, position, color, brightness, and even the number of the selected area(s)**, the micro-processor 263 sends a parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310, it is noted that changing the color, brightness, and even the number of the selected area(s) inherent increase (adding) or decrease (subtracting) the level of the composed video signals of the highlight portion.

In considering claim 4, the claimed wherein the selection input part comprises a size control key for controlling a size of the highlight portion is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the position and size of the selected area (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 6, line 39).

In considering claim 5, the claimed wherein the selection input part comprises a position control key for controlling a position of the highlight portion is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the position and size of the selected area (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 6, line 39).



In considering claim 6, the claimed wherein the highlight signal comprises at least one color signal corresponding to the video signals; and the selection input part comprises a signal control key for controlling a level of said at least one color signal is met by the control signal 310 which is generated by the OSP signal generator 330 and the user can optionally adjust the colors and the brightness of the pixels within the selected area(s) (Fig. 2, col. 2, lines 50-55 and col. 5, line 61 to col. 7, line 67).

Claim 7 is rejected for the same reason as discussed in claim 6.

Claim 8 is rejected for the same reason as discussed in claim 6.

Claim 9 is rejected for the same reason as discussed in claim 5.

Claim 10 is rejected for the same reason as discussed in claim 6.

Claim 11 is rejected for the same reason as discussed in claim 1.

Claim 12 is rejected for the same reason as discussed in claim 1.

Claim 17 is rejected for the same reason as discussed in claim 6.

Claim 22 is rejected for the same reason as discussed in claim 1 and further the claimed wherein said control means further comprises an image sharpness part connected between said selection means and said signal composing part for adjusting a signal size representing a borderline of the highlight portion according to a selection by said selection means, and for supplying the adjusted signal size to said signal comprising part is met by the digital image processor 300, when the presenter uses the remote controller to change the scope, position, color, brightness, and even the number of the selected area(s) (Fig. 2, col. 6, lines 6-24)..

In considering claim 27, the claimed wherein said displaying means comprises an on screen display (OSD) selecting part and a control key part for controlling a size and a position of the highlight portion is met by the remote controller which changes the scope, position, color, brightness, and even the number of the selected area(s), the micro-processor 263 sends the parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310 (Figs. 2 and 3, col. 5, line 61 to col. 6, line 24).

In considering claim 28, the claimed wherein said control key part comprises a size control key for controlling the size of the highlight portion, a position control key for controlling the position of the highlight portion, and a signal control key for controlling a value of the highlight signal is met by the remote controller which changes the scope, position, color, brightness, and even the number of the selected area(s), the micro-processor 263 sends the parameter setting signal 350 to the OSP signal generator 330, thus the OSP signal generator 330 generates the control signal 310 (Figs. 2 and 3, col. 5, line 61 to col. 6, line 24).

In considering claim 29, the claimed wherein said control means further comprises a adjuster part for adjusting the picture in response to external signals adjusted by said control key part is met by the OSP image processor 231 (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 31, the claimed wherein a user can employ the OSD selecting part to select the OSD so that said highlight portion and said OSD are

displayed simultaneously is met by the OSP image processor 231 (Fig. 3, col. 6, line 25 to col. 7, line 67).

Claim 32 is rejected for the same reason as discussed in claim 1 and further the claimed wherein said control means further comprises a clock generating part for generating a clock signal to set up a size and a position of the highlight portion is met by the pixel clock which is timing of displaying the further data (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 33, the claimed said control means further comprising an adjuster part connected to said clock generating part for receiving the clock signal, and for adjusting a size of the clock signal according to a control signal from said selection means is met by the vertical pixel shift register 404 and the horizontal shift register 402 (Fig. 3, col. 6, line 25 to col. 7, line 67).

In considering claim 34, the claimed said control means further comprising input terminals for receiving a control signal for controlling brightness of the video signals is met by the first brightness control device 525 and the second brightness control device 526 (Fig. 3, col. 6, line 25 to col. 7, line 67).

Claim 37 is rejected for the same reason as discussed in claims 28 and 29.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 30 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1)

In considering claim 30, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed wherein selection of highlighting by a user through said selection means causes highlight signals to be supplied to said adjuster part through an SCL port and an SDA port connecting said selection means to said control means. The capability of using an SCL port and an SDA port connecting said selection means to said control means old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known of using an SCL port and an SDA port connecting said selection means to said control means into Kuo et al's system since it merely amounts of selecting available ports.

Claim 36 is rejected for the same reason as discussed in claim 30 above.

7. Claims 23-24 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1) in view of Suen et al. (US Patent No. 6,552,750B1).

In considering claim 23, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed wherein said highlight signal generating part comprises an R highlight signal generating part, a G highlight signal generating part, and a B highlight signal generating part for

generating R, G and B highlight signals, respectively. Suen et al teach that the data separator 35 separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the different (red, green, blue) color values as taught by Suen et al into Kuo et al's system in order to change the size of graphic data for presentation on an television output display.

In considering claim 24, the claimed wherein the video signals generated by said signal generating means comprise R, G and B video signals, and R highlight signal generating part, the G highlight signal generating part, and the B highlight signal generating part adjust the sizes of the R, G and B video signals, respectively is met by the separator 35 which separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44) of Suen et al.

In considering claim 35, Kuo et al disclose all the limitations of the instant invention as discussed in claims 22 and 34 above, except for providing the claimed said video signals comprising R, G and B signals, and said input terminals receiving R-brightness, G-brightness and B-brightness signals, respectively. Suen et al teach that the data separator 35 separates the different (red, green, blue) color values so that they may be handled individually and transfers the separated values to the mixer 36 where

they are selected for transfer to the display 24 (Fig. 2, col. 5, lines 24-44). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the different (red, green, blue) color values as taught by Suen et al into Kuo et al's system in order to change the size of graphic data for presentation on an television output display.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (US Patent No. 6,226,040 B1) in view of Kim (US Patent No. 6,473,130B1).

In considering claim 26, Kuo et al disclose all the limitations of the instant invention as discussed in claims 1 and 22 above, except for providing the claimed said signal composing part combines the video signals generated by said signal generating means with borderline signals indicating the borderline of the highlight portion outputted by said image sharpness part, and outputs a resultant combined signal to said displaying means. Kim teaches that the sub-picture display apparatus according to the present invention provides an effect capable of distinctively displaying the sub-picture more definitely and clearly, by thickening the boundary portion of the sub-picture and varying the brightness of the sub-picture to become brighter, in the case that the main picture is complicated spatially or an amount of temporal movement of the main picture is large (Fig. 4, col. 3, line 5 to col. 4, line 8). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate thickening the boundary portion of the sub-picture as taught by Kim into Kuo et al' system in order to display a sub-picture in which the display state of the sub-picture is varied according to an image complexity and/or a degree of movement of a main picture, to thereby allow

the sub-picture to be always distinct irrespective of the image state of the main picture (col. 1, lines 54-60).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 29, 2007



Trang U. Tran  
Primary Examiner  
Art Unit 2622